

## ABSTRACT

The present invention provides virtual mapping of system resource identifiers in use by a software application for the purpose of making the running state of an application node independent. By adding a layer of indirection between the application and the resource, new system resources are reallocated and then can be mapped to the application's existing resource requirements while it is running, without the application detecting a failure or change in resource handles. This layer of indirection makes the application's system resource identifier (system RID) transparent to the application. RID's are usually numeric in form, but can also be alphanumeric. RID's are unique to a machine, and can be reused once all claims to a specific RID have been given up.